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(71)Applicant : MATSUSHITA ELECTRIC IND CO
LTD

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(72)Inventor : IKEHATA TOSHIHIKO
SHIGEMATSU TOSHIO
KOSHIBA NOBUHARU
HAYAKAWA HAYASHI

(54) CHARGEABLE ELECTROCHEMICAL DEVICE

(57)Abstract:

PURPOSE: To improve the high-temperature load characteristic by coating a metal current collector welded to the inner face of a case with a conductive carbon film.

CONSTITUTION: This device is constituted of a positive electrode 4 made of activated carbon, a negative electrode 7 made of a lithium alloy, and an electrolyte made of a nonaqueous solvent dissolved with lithium salt, and a conductive film is provided on the surface of a metal current collector 8 welded to the inner face of a case 1. The metal current collector is formed of either a simple substance of titanium, stainless steel, aluminum or their alloy, and the conductive film is formed of colloidal carbon using water glass as a binder and carbon as a conductive agent. Thereby, no insulating film is formed on the contact surface with the positive electrode, thus the contact between the positive electrode and the case is kept satisfactory, and the high-temperature load characteristic is improved.

